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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,724	10/22/2003	Scott H. Gillis	14072-036001 / W 617	7679

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EXAMINER	
PAK, JOHN D	

ART UNIT	PAPER NUMBER
1616	

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/690,724	GILLIS ET AL.	
	Examiner	Art Unit	
	JOHN PAK	1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-42 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) 1-42 are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-4, 22-25, directed to a method of treating a subject having a condition, wherein the subject has a respiratory condition, which is a bacterial condition, biofilm condition, non-viral microbial condition, inflammatory condition or fungal condition, and the subject is treated with a nano/crystalline material that is atomically disordered.

II. Claims 1-4, 22-25, directed to a method of treating a subject having a condition, wherein the subject has a viral respiratory condition, and the subject is treated with a nano/crystalline material that is atomically disordered.

III. Claims 1-4, 22-25, directed to a method of treating a subject having a condition, wherein the subject has an autoimmune respiratory condition, and the subject is treated with a nano/crystalline material that is atomically disordered.

IV. Claims 1-4, 22-25, directed to a method of treating a subject having a condition, wherein the subject has an idiopathic respiratory condition, and the subject is treated with a nano/crystalline material that is atomically disordered.

V. Claims 1-4, 22-25, directed to a method of treating a subject having a condition, wherein the subject has non-cancerous hyperproliferative

respiratory condition, and the subject is treated with a nano/crystalline material that is atomically disordered.

VI. Claims 1, 5-7, 22, 26-28, directed to a method of treating a subject having a condition, wherein the subject has a musculo-skeletal condition, which is a bacterial condition, biofilm condition, non-viral microbial condition, inflammatory condition or fungal condition, and the subject is treated with a nano/crystalline material that is atomically disordered.

VII. Claims 1, 5-7, 22, 26-28, directed to a method of treating a subject having a condition, wherein the subject has a viral musculo-skeletal condition, and the subject is treated with a nano/crystalline material that is atomically disordered.

VIII. Claims1, 5-7, 22, 26-28 , directed to a method of treating a subject having a condition, wherein the subject has an autoimmune musculo-skeletal condition, and the subject is treated with a nano/crystalline material that is atomically disordered.

IX. Claims1, 5-7, 22, 26-28 , directed to a method of treating a subject having a condition, wherein the subject has an idiopathic musculo-skeletal condition, and the subject is treated with a nano/crystalline material that is atomically disordered.

X. Claims 1, 5-7, 22, 26-28, directed to a method of treating a subject having a condition, wherein the subject has non-cancerous hyperproliferative musculo-skeletal condition, and the subject is treated with a nano/crystalline material that is atomically disordered.

XI. Claims 1, 8-10, 22, 29-30, directed to a method of treating a subject having a condition, wherein the subject has a circulatory condition, which is a bacterial condition, biofilm condition, non-viral microbial condition, inflammatory condition or fungal condition, and the subject is treated with a nano/crystalline material that is atomically disordered.

XII. Claims 1, 8-10, 22, 29-30, directed to a method of treating a subject having a condition, wherein the subject has a circulatory respiratory condition, and the subject is treated with a nano/crystalline material that is atomically disordered.

XIII. Claims 1, 8-10, 22, 29-30, directed to a method of treating a subject having a condition, wherein the subject has an autoimmune circulatory condition, and the subject is treated with a nano/crystalline material that is atomically disordered.

XIV. Claims 1, 8-10, 22, 29-30, directed to a method of treating a subject having a condition, wherein the subject has an idiopathic circulatory

condition, and the subject is treated with a nano/crystalline material that is atomically disordered.

XV. Claims 1, 8-10, 22, 29-30 , directed to a method of treating a subject having a condition, wherein the subject has non-cancerous hyperproliferative circulatory condition, and the subject is treated with a nano/crystalline material that is atomically disordered.

XVI. Claims 1, 11-13, 22, 32-34 directed to a method of treating a subject having a condition, wherein the subject has a mucosal/serosal condition, which is a bacterial condition, biofilm condition, non-viral microbial condition, inflammatory condition or fungal condition, and the subject is treated with a nano/crystalline material that is atomically disordered.

XVII. Claims 1, 11-13, 22, 32-34, directed to a method of treating a subject having a condition, wherein the subject has a viral mucosal/serosal condition, and the subject is treated with a nano/crystalline material that is atomically disordered.

XVIII. Claims 1, 11-13, 22, 32-34, directed to a method of treating a subject having a condition, wherein the subject has an autoimmune mucosal/serosal condition, and the subject is treated with a nano/crystalline material that is atomically disordered.

XIX. Claims 1, 11-13, 22, 32-34, directed to a method of treating a subject having a condition, wherein the subject has an idiopathic mucosal/serosal condition, and the subject is treated with a nano/crystalline material that is atomically disordered.

XX. Claims 1, 11-13, 22, 32-34, directed to a method of treating a subject having a condition, wherein the subject has non-cancerous hyperproliferative mucosal/serosal condition, and the subject is treated with a nano/crystalline material that is atomically disordered.

XXI. Claims 3, 14-18, 24, 35-39, directed to a method of treating a subject having a condition, wherein the subject has a respiratory cancer condition, and the subject is treated with a nano/crystalline material that is atomically disordered.

XXII. Claims 6, 14-18, 26, 35-39, directed to a method of treating a subject having a condition, wherein the subject has a musculo-skeletal cancer condition, and the subject is treated with a nano/crystalline material that is atomically disordered.

XXIII. Claims 8, 14-18, 30, 35-39, directed to a method of treating a subject having a condition, wherein the subject has circulatory cancer, and the subject is treated with a nano/crystalline material that is atomically disordered.

XXIV. Claims 12, 14-18, 33, 35-39, directed to a method of treating a subject having a condition, wherein the subject has mucosal/serosal cancer, and the subject is treated with a nano/crystalline material that is atomically disordered.

XXV. Claims 14-18, 20, 35-39, 41, directed to a method of treating a subject having a condition, wherein the subject has skin/integument condition, and the subject is treated with a nano/crystalline material that is atomically disordered.

XXVI. Claims 1, 19-22, 40-42, directed to a method of treating a subject having a condition, wherein the subject has a skin or integument condition, which is a bacterial condition, biofilm condition, non-viral microbial condition, inflammatory condition or fungal condition, and the subject is treated with a nano/crystalline material that is atomically disordered.

XXVII. Claims 1, 19-22, 40-42, directed to a method of treating a subject having a condition, wherein the subject has a viral respiratory condition, and the subject is treated with a nano/crystalline material that is atomically disordered.

XXVIII. Claims 1, 19-22, 40-42, directed to a method of treating a subject having a condition, wherein the subject has an autoimmune respiratory condition,

and the subject is treated with a nano/crystalline material that is atomically disordered.

XXIX. Claims 1, 19-22, 40-42, directed to a method of treating a subject having a condition, wherein the subject has an idiopathic respiratory condition, and the subject is treated with a nano/crystalline material that is atomically disordered.

XXX. Claims 1, 19-22, 40-42, directed to a method of treating a subject having a condition, wherein the subject has non-cancerous hyperproliferative respiratory condition, and the subject is treated with a nano/crystalline material that is atomically disordered.

XXXI. Claims 1-4, directed to a method of treating a subject having a condition, wherein the subject has a respiratory condition, which is a bacterial condition, biofilm condition, non-viral microbial condition, inflammatory condition or fungal condition, and the subject is treated with a nano/crystalline material that is not atomically disordered.

XXXII. Claims 1-4, directed to a method of treating a subject having a condition, wherein the subject has a viral respiratory condition, and the subject is treated with a nano/crystalline material that is atomically disordered.

XXXIII. Claims 1-4, directed to a method of treating a subject having a condition, wherein the subject has an autoimmune respiratory condition, and the

subject is treated with a nano/crystalline material that is not atomically disordered.

XXXIV. Claims 1-4, directed to a method of treating a subject having a condition, wherein the subject has an idiopathic respiratory condition, and the subject is treated with a nano/crystalline material that is not atomically disordered.

XXXV. Claims 1-4, directed to a method of treating a subject having a condition, wherein the subject has non-cancerous hyperproliferative respiratory condition, and the subject is treated with a nano/crystalline material that is not atomically disordered.

XXXVI. Claims 1, 5-7, directed to a method of treating a subject having a condition, wherein the subject has a musculo-skeletal condition, which is a bacterial condition, biofilm condition, non-viral microbial condition, inflammatory condition or fungal condition, and the subject is treated with a nano/crystalline material that is not atomically disordered.

XXXVII. Claims 1, 5-7, directed to a method of treating a subject having a condition, wherein the subject has a viral musculo-skeletal condition, and the subject is treated with a nano/crystalline material that is atomically disordered.

XXXVIII. Claims1, 5-7, directed to a method of treating a subject having a condition, wherein the subject has an autoimmune musculo-skeletal condition, and the subject is treated with a nano/crystalline material that is not atomically disordered.

XXXIX. Claims 1, 5-7, directed to a method of treating a subject having a condition, wherein the subject has an idiopathic musculo-skeletal condition, and the subject is treated with a nano/crystalline material that is not atomically disordered.

XL. Claims 1, 5-7, directed to a method of treating a subject having a condition, wherein the subject has non-cancerous hyperproliferative musculo-skeletal condition, and the subject is treated with a nano/crystalline material that is not atomically disordered.

XLI. Claims 1, 8-10, Directed to a method of treating a subject having a condition, wherein the subject has a circulatory condition, which is a bacterial condition, biofilm condition, non-viral microbial condition, inflammatory condition or fungal condition, and the subject is treated with a nano/crystalline material that is not atomically disordered.

XLII. Claims 1, 8-10, directed to a method of treating a subject having a condition, wherein the subject has a circulatory respiratory condition, and

the subject is treated with a nano/crystalline material that is not atomically disordered.

XLIII. Claims 1, 8-10, directed to a method of treating a subject having a condition, wherein the subject has an autoimmune circulatory condition, and the subject is treated with a nano/crystalline material that is not atomically disordered.

XLIV. Claims 1, 8-10, directed to a method of treating a subject having a condition, wherein the subject has an idiopathic circulatory condition, and the subject is treated with a nano/crystalline material that is not atomically disordered.

XLV. Claims 1, 8-10, directed to a method of treating a subject having a condition, wherein the subject has non-cancerous hyperproliferative circulatory condition, and the subject is treated with a nano/crystalline material that is not atomically disordered.

XLVI. Claims 1, 11-13, directed to a method of treating a subject having a condition, wherein the subject has a mucosal/serosal condition, which is a bacterial condition, biofilm condition, non-viral microbial condition, inflammatory condition or fungal condition, and the subject is treated with a nano/crystalline material that is not atomically disordered.

XLVII. Claims 1, 11-13, directed to a method of treating a subject having a condition, wherein the subject has a viral mucosal/serosal condition, and the subject is treated with a nano/crystalline material that is not atomically disordered.

XLVIII. Claims 1, 11-13, directed to a method of treating a subject having a condition, wherein the subject has an autoimmune mucosal/serosal condition, and the subject is treated with a nano/crystalline material that is not atomically disordered.

XLIX. Claims 1, 11-13, directed to a method of treating a subject having a condition, wherein the subject has an idiopathic mucosal/serosal condition, and the subject is treated with a nano/crystalline material that is not atomically disordered.

L. Claims 1, 11-13, directed to a method of treating a subject having a condition, wherein the subject has non-cancerous hyperproliferative mucosal/serosal condition, and the subject is treated with a nano/crystalline material that is not atomically disordered.

LI. Claims 3, 14-18, directed to a method of treating a subject having a condition, wherein the subject has a respiratory cancer condition, and the subject is treated with a nano/crystalline material that is not atomically disordered.

LII. Claims 6, 14-18, directed to a method of treating a subject having a condition, wherein the subject has a musculo-skeletal cancer condition, and the subject is treated with a nano/crystalline material that is not atomically disordered.

LIII. Claims 8, 14-18, directed to a method of treating a subject having a condition, wherein the subject has circulatory cancer, and the subject is treated with a nano/crystalline material that is not atomically disordered.

LIV. Claims 12, 14-18, Directed to a method of treating a subject having a condition, wherein the subject has mucosal/serosal cancer, and the subject is treated with a nano/crystalline material that is not atomically disordered.

LV. Claims 14-18, 20, directed to a method of treating a subject having a condition, wherein the subject has skin/integument condition, and the subject is treated with a nano/crystalline material that is not atomically disordered.

LVI. Claims 1, 19-21, Directed to a method of treating a subject having a condition, wherein the subject has a skin or integument condition, which is a bacterial condition, biofilm condition, non-viral microbial condition, inflammatory condition or fungal condition, and the subject is treated with a nano/crystalline material that is not atomically disordered.

LVII. Claims 1, 19-21, directed to a method of treating a subject having a condition, wherein the subject has a viral respiratory condition, and the subject is treated with a nano/crystalline material that is not atomically disordered.

LVIII. Claims 1, 19-21, directed to a method of treating a subject having a condition, wherein the subject has an autoimmune respiratory condition, and the subject is treated with a nano/crystalline material that is not atomically disordered.

LIX. Claims 1, 19-21, directed to a method of treating a subject having a condition, wherein the subject has an idiopathic respiratory condition, and the subject is treated with a nano/crystalline material that is not atomically disordered.

LX. Claims 1, 19-21, directed to a method of treating a subject having a condition, wherein the subject has non-cancerous hyperproliferative respiratory condition, and the subject is treated with a nano/crystalline material that is not atomically disordered.

It is an understatement to say that there are multiple inventions contained in applicant's claims. The following is a summary of applicant's broad claim scope:

Diseases covered by the claims: The Examiner cannot think of any disease that is not covered by applicant's claimed invention. Take a look at claims 1 and 13-37 and see if anyone could disagree. Applicant's invention apparently treats all that ails the Mammalian Kingdom.

Therapeutic agent: The claims require "a metal-containing material." About 80% of the first 103 elements are metallic in part at least. So applicant's invention reads on compounds of about 80% of the first 103 elements of the Periodic Table.

In response to applicant's broad claim scope, the Examiner has attempted to restrict based on patentably distinct inventive subjects, which would require less than undue burden to reasonably search and examine. Applicant is advised that should applicant amend the claims in any way, he should expect corresponding alterations or additions of groups, if appropriate. Each of the invention groups is patentably distinct over the others by virtue of separate conditions being treated, distinct therapeutic agents, distinct administration protocol or combinations thereof. Distinctness is supported by separate patentability of somewhat similarly limited inventions in the art: U.S. Patent No. 6,939,568, claims directed to method of treating inflammation of the skin with atomically disordered metal; U.S. Patent No. 6,692,773, claims directed to treating hyperproliferative skin condition with atomically disordered metal; U.S. Patent

No. 6,692,773, claims directed to silver-containing composition for treating sinusitis. With respect to search and examination burden, applicant should know that the Examiner is allotted less than 14 hours to examine this application from start to finish (abandonment, allowance or Examiner's Answer). It is humanly impossible for one Examiner to search and examine an application like this without an extensive restriction. The search and examination of more than one invention group would place an undue burden on the Examiner if the restriction were not required, because so many distinct and divergent disease conditions and active agent metals are encompassed.

Therefore, for reasons of distinctness and undue burden, the restriction requirement as set forth above is deemed to be proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143). It is suggested that the claims be amended to reflect the elected subject matter.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to JOHN PAK whose telephone number is **(571)272-0620.**

The Examiner can normally be reached on Monday to Friday from 8 AM to 4:30 PM. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's SPE, Sreeni Padmanabhan, can be reached on **(571)272-0629**.

The fax phone number for the organization where this application or proceeding is assigned is **(571)273-8300**. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-1600. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).